

A new range extension record of the canopy-dwelling frog *Isthmohyla picadoi* (Dunn, 1937) (Amphibia: Hylidae) from the Serranía de Tabasará, Panamá.

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Isthmohyla picadoi was described from the southwestern slope of Volcán Barba, Cantón de Santa Barbara, Provincia de Heredia, in the Cordillera Central of north-central Costa Rica (Dunn, 1937; Savage, 1974). It inhabits the Lower Montane and Montane Rainforest life zones, approximately between 1900 and 2800 m asl, where it is markedly associated with bromeliad phytotelmata, that serve as calling site, mating place and nursery ground (Stuckert et al., 2009). It is only exceptionally found on rocks in streams (Duellman, 2001). *Isthmohyla picadoi* is able to adapt to degraded habitats like secondary forest and even cattle pasture, assumed that trees with large bromeliads persist (Solís et al., 2004).

Although the species' characteristic call (Lindquist and Cossel, 2007) is commonly heard at upland sites, its distribution is only incompletely documented by voucher specimens in public collections. In the documentation of its Costa Rican distribution range there is a big gap in the Cordillera de Talamanca, while in Panama it has solely been documented from the western part of the Cordillera de Talamanca (Fig. 1). Even though some authors (Solís et al., 2004) list *I. picadoi* for the La Fortuna Forest Reserve in Panama, there are no voucher specimens available to prove its presence there. On July 08 2010 we collected an adult male (SMF 89879) from the southern slope of the little explored Cerro Saguí (8.564°N, 81.822°W, altitude: 2030 m), about 1 km uphill in northern direction from Finca Alto Cedro. The frog was located by following its call that came from a big epiphytic bromeliad situated about four meters high on the branch of a tree. We managed to get the frog with

the aid of an extendable potato rake (Wolf Multistar ZM-TS pole with iL-M3 head). Additional males could be heard calling, but were out of reach. This record extends the known distribution range about 70 km to the east. It represents the first record for the Comarca Ngöbe-Buglé as well as the first record for the eastern portion of the Panamanian central mountain range, the so called Serranía de Tabasará, that is roughly separated from the Cordillera de Talamanca by the Fortuna depression. We could further hear its call at elevations above 1800 m asl at La Nevera, on the western slope of Cerro Santiago, about ten more kilometers east of Cerro Saguí, but could not obtain any voucher specimens.

The collected specimen is readily assigned to *Isthmohyla picadoi*, but differs in coloration from specimens collected at other sites by us (Fig. 2), and from color descriptions in literature (Duellman, 2001, Savage, 2002) that describe it as yellow to tan. We could not observe conspicuous differences between day and night coloration in any of the collected specimens, and recorded the daytime coloration of the Cerro Saguí specimen as follows (colors and the color codes in parentheses are those of Smithe (1975–1981)): Dorsum Ground Cinnamon (239), dorsal surfaces of legs and lateral surfaces of body Smoke Gray (44), iris Ferruginous (41). Since we collected only a single specimen at the new site we do not know if this coloration is a peculiarity of this population. There were no obvious additional differences observed.

The new record leads us to the assumption that *Isthmohyla picadoi* inhabits all peaks of at least 1900 m asl in the whole central mountain range of Costa Rica and western Panama where suitable habitat is available. Thus it should be considered as much more widely distributed than previously suspected.

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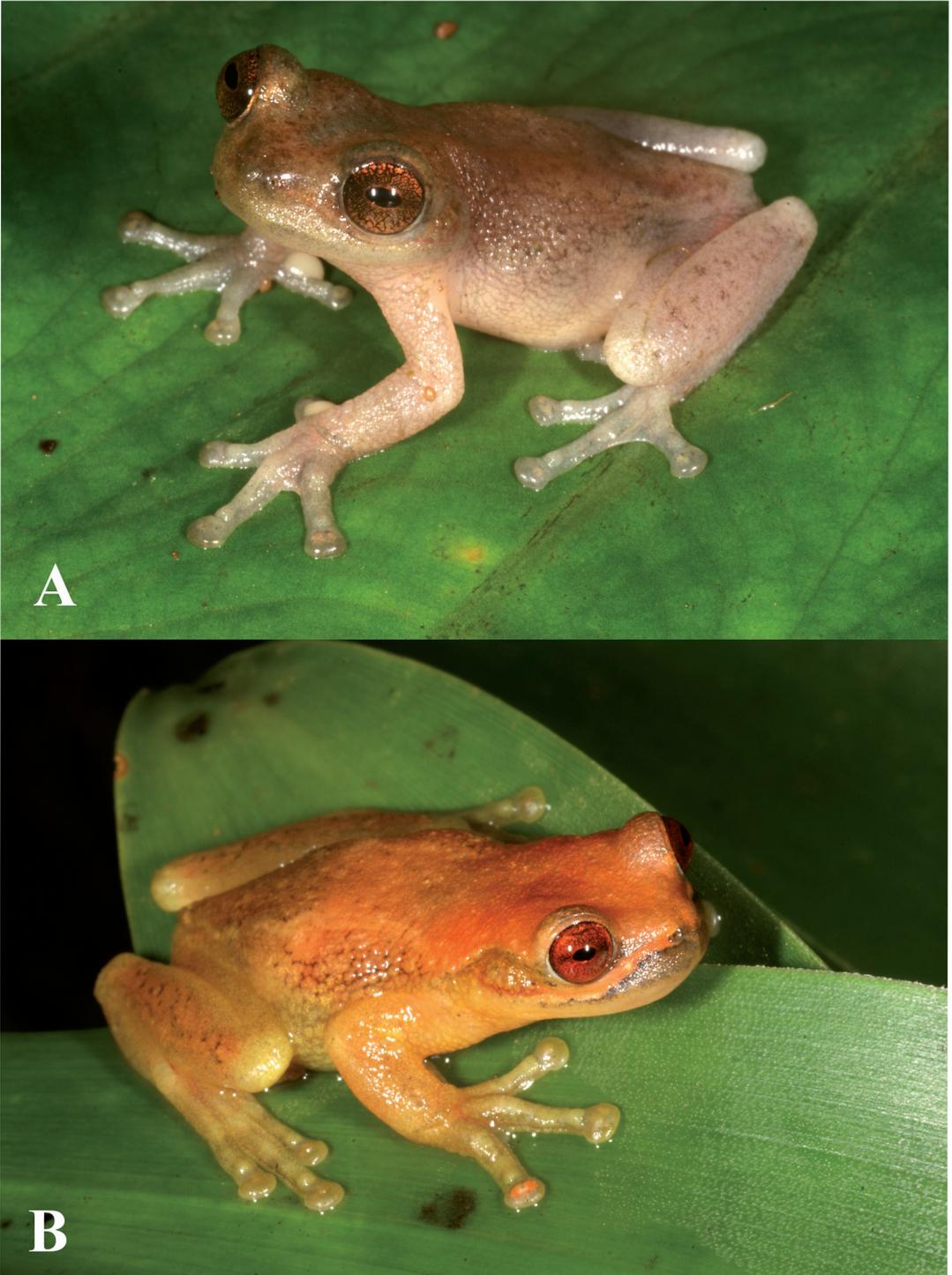


Figure 2. Pictures of *Isthmohyla picadoi* in life, both at daytime, showing differences in coloration in males. A SMF 89879 from Cerro Sagui in gray color phase. B SMF 89878 from Jurutungo at the southern slope of Cerro Pando in common color phase.

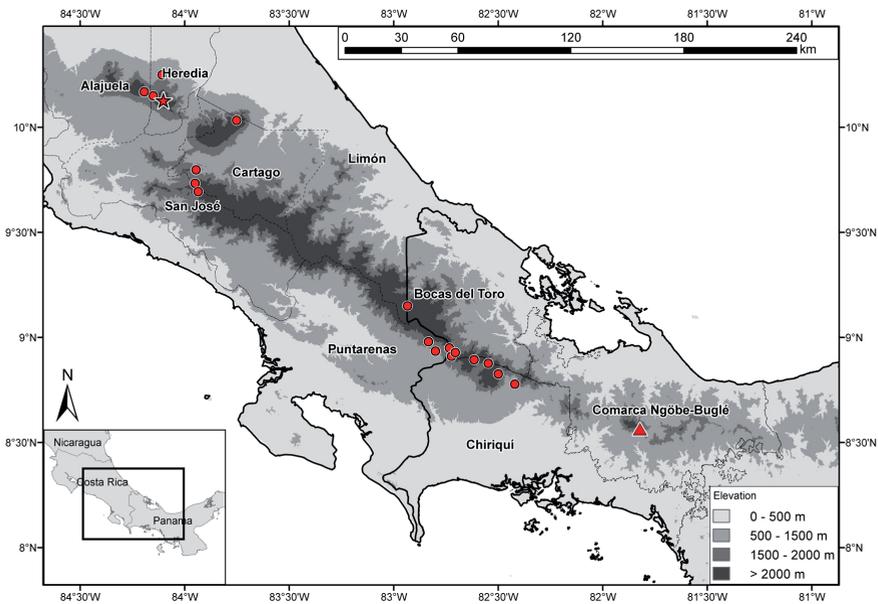


Figure 1. Map of the Lower Central American highlands shared by Costa Rica and Panama, showing the documented distribution of *Isthmohyla picadoi*. The star represents the type locality at Volcán Barva, the record at Cerro Sagui reported herein is marked with a triangle; all other collection sites are indicated by circles. Solid lines represent national border and coastal lines, dashed lines indicate provincial limits with the respective name of the province written inside.

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